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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,086	07/11/2001	Yukio Ichikawa	33791	6838

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EXAMINER

LE, DUY K

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 12/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/889,086

Applicant(s)

ICHIKAWA ET AL

Examiner

Duy K Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1 and 6 are rejected under 35 U.S.C. 102(a) as being anticipated by Yoshida et al. (JP Patent 11-312285, Machine Translation).

As to claim 1, Figures 1-3 in Yoshida show an on-vehicle communication system including location information detecting means 22; state sensor means 21 for detecting an abnormal state and outputting state information; means 24 for recording predetermined location information, having time information and latitude/ longitude information of the location information obtained by the location information detecting means 22 at each point; first radio communication means 23 for transmitting predetermined data having the state information, the predetermined location information and a terminal ID to an information service center on occurrence of a predetermined event; and voice communication means 36

wherein said on-vehicle communication system comprises an on-vehicle terminal main unit and a mobile terminal 36 detachable from said on vehicle terminal main unit, and

wherein said mobile terminal 36 includes voice communication means 36, and

wherein said on vehicle terminal main unit and said mobile terminal can communicate with each other via second radio communication means 35; and

wherein said mobile terminal 36 on completion of transmission of the predetermined data by the first radio communication means 33 to the information service center 2, performs voice communications with the information service center via said on vehicle terminal main unit with the second radio communication means 35 ("when an emergency occurs in a vehicle due to accident, etc., the detailed content of the accident is notified to an emergency aid center by first executing the position information of own vehicle, accident information, and furthermore, such emergency information as vehicle ID and crew ID information, etc., stored in advance are notified through radio data communication by a first radio transmission means 33, and automatically switching the data communication to voice communication by a second radio transmission means 35, when the data communication is completed" (Abstract). See also paragraphs [0013] to [0015] for detailed description of Figures 1-3).

As to claim 6, Figure 5 in Yoshida shows an information service center comprising:  
means for distinguish information whether the information is transmitted from said on vehicle terminal main unit or the information is transmitted from said mobile terminal when said service center receives and restores information transmitted from a plurality of types of on-vehicle communication system according to one of Claim 1 through Claim 5 to location information of each point according to a predetermined communication protocol ("in the emergency relief center 2, the emergency intelligence transmitted in data communication form is received with a communication control means 52 to control the exchange through the 51 casks of means-of-communications exchange. The communications control means 52 is controlled to be able to perform cutting control of a circuit by communications control means 52 while decoding the emergency intelligence first transmitted in data communication form and specifying the

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content of accident" (paragraph [0026]). "Subsequently, the end of data communication is detected with the communications control means 52, and ACK is returned to emergency relief center side empty-vehicle both sides. CPU41 by the side of vehicles detects this ACK, in a vehicle's side, the 2<sup>nd</sup> radio-transmission means 35 is operated and an automatic change is carried out to speech communication" (paragraph [0027])).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-5 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 11-312285 to Yoshida et al. in view of Tognazzini (U.S. Patent 5,914,675).

As to claim 2, the Yoshida reference discloses the on-vehicle communication system according to claim 1. However, it does not disclose the system further comprises location information detecting means as a function of said mobile terminal. The Tognazzini reference discloses "the GPS receiver 16 may be integrated as part of the emergency locator device, where the emergency locator device 10 operates as an integrated wireless telephone having the GPS receiver 16" (Col. 4, lines 30-33).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Yoshida wherein the system further comprises location information detecting means as a function of said mobile terminal, as taught by

Tognazzini, in order to implement the system as a portable unit suitable for hand-held use for survivors of a crash.

As to claim 3, the Yoshida reference discloses the on-vehicle communication system according to claim 1. However, it does not disclose the mobile terminal further includes a function of the state sensor means. The Tognazzini reference discloses "the GPS receiver 16 may be integrated as part of the emergency locator device, where the emergency locator device 10 operates as an integrated wireless telephone having the GPS receiver 16" (Col. 4, lines 30-33). "The emergency locator device includes a GPS receiver interface, a crash sensor or manual triggering device" (Col. 3, lines 65-67).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Yoshida wherein the mobile terminal further includes a function of the state sensor means, as taught by Tognazzini, in order to implement the system as a portable unit suitable for hand-held use for survivors of a crash.

As to claim 4, the Yoshida reference discloses an on-vehicle communication system according to claim 1. However, it does not disclose the mobile further includes functions of the location information detecting means and the state sensor means. The Tognazzini reference discloses "the emergency locator device includes a GPS receiver interface, a crash sensor or manual triggering device" (Col. 3, lines 65-67). "The GPS receiver 16 may be integrated as part of the emergency locator device, where the emergency locator device 10 operates as an integrated wireless telephone having the GPS receiver 16" (Col. 4, lines 30-33).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Yoshida wherein the mobile further includes

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functions of the location information detecting means and the state sensor means, as taught by Tognazzini, in order to implement the system as a portable unit suitable for hand-held use for survivors of a crash.

As to claim 5, the Yoshida reference discloses an on-vehicle communication system according to claim 1. However, it does not disclose means for detecting a relative distance between said on-vehicle terminal main unit and said mobile terminal, wherein said means switches a main system for communications of said on-vehicle communication system. The Tognazzini reference teaches means for detecting a relative distance between an on-vehicle terminal main unit and a mobile terminal, wherein said means switches a main system for communications of said on-vehicle communication system ("FIG. 2B is a flow diagram illustrating the operations of the control processor 24b in the emergency receiver system. The receiver system 12 may be implemented as a portable handheld telephone device having an LCD display 64 for use by rescue personnel" (Col. 8, lines 59-63). "The system 12 may use advanced calling operations of the telephone network 20, for example, conferencing capabilities to enable simultaneous conversations between the rescuers and the users of the emergency locator device 10" (Col. 9, lines 7-11). "As recognized in the art, the control processor 24b may also access digital map databases to provide a geographical and/or topographical display of a region of a crash site on the display 64 based upon the received GPS data" (Col. 9, lines 23-26)).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Yoshida to have means for detecting a relative distance between an on-vehicle terminal main unit and a mobile terminal, wherein said means switches a main system for communications of said on-vehicle communication system, as taught

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by Tognazzini, in order to help rescuers in locating the area/region of a crash/emergency and in communicating with users of the on-vehicle communication system in an emergency.

As to claim 7, as cited in claim 1, Figures 1-3 in Yoshida show an on-vehicle communication system including location information detecting means 22; state sensor means 21 for detecting an abnormal state and outputting state information; means 24 for recording location information having time information and latitude/longitude information of the location information obtained by the location information detecting means 22 at each point; first radio communication means 23 for transmitting predetermined data having the state information, the predetermined location information and a terminal ID to an information service center 2 on occurrence of a predetermined event; and voice communication means 36,

wherein said on-vehicle communication system comprises an on-vehicle terminal main unit and a mobile terminal 36 detachable from said on-vehicle terminal main unit, and

wherein said mobile terminal 36 includes voice communication means 36, and

wherein said on-vehicle terminal main unit and said mobile terminal can communicate with each other via second radio communication means 35.

However, it does not disclose the mobile terminal includes data retaining means for temporarily storing data and the data retaining means temporarily stores data updated as required while the vehicle is traveling. The Tognazzini reference (Figure 1) discloses "the GPS receiver 16 thus determines a current location of the emergency locator device 10 within an accuracy of +/-100 meters and supplies the current location information to the GPS interface 14 for storage in memory" (Col. 4, lines 54-57). "If the received data is GPS data, the control processor 24a accesses the previously-stored GPS data from the memory 38a in step 104, and compares the



received GPS data with the stored GPS data in step 106. If the variations between GPS data indicate that the device 10 has moved at least a predetermined distance, for example, a distance  $L=100$  meters, the control processor 24a updates the memory 38a in step 108” (Col. 7, lines 24-32).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Yoshida wherein the mobile terminal includes data retaining means for temporarily storing data and the data retaining means temporarily stores data updated as required while the vehicle is traveling, as taught by Tognazzini, so that if the mobile terminal becomes separated from the vehicle during a crash, the control processor in the mobile terminal can still provide location and vehicle status information to rescue teams by accessing the memory.

As to claim 8, Yoshida-Tognazzini discloses the on-vehicle communication system according to claim 7. The Tognazzini reference further discloses the data retaining means stores higher priority emergency information data to be transmitted to the information service center, and the emergency information data stored in the data retaining means can be taken out of the vehicle together with said mobile terminal in the event of an emergency (“the GPS receiver 16 thus determines a current location of the emergency locator device 10 within an accuracy of +/- 100 meters and supplies the current location information to the GPS interface 14 for storage in memory” (Col. 4, lines 54-57). “Finally, the telephone portion of the emergency locator device 10 and the emergency receiver each include a non-volatile memory 38 that stores a predetermined number corresponding to a rescue station” (Col. 5, lines 20-23). “If the emergency locator device 10 becomes separated from the rest of the vehicle during a crash, the control

processor 24a can still provide location and vehicle status information to rescue teams by accessing the memory 38a" (Col. 5, lines 56-60)).

As to claim 9, Yoshida-Tognazzini discloses the on-vehicle communication system according to claim 8. The Yoshida reference further discloses the on-vehicle communication system makes voice communication with the information service center after transmitting the emergency information data to the information service center from the mobile terminal ("when an emergency occurs in a vehicle due to accident, etc., the detailed content of the accident is notified to an emergency aid center by first executing the position information of own vehicle, accident information, and furthermore, such emergency information as vehicle ID and crew ID information, etc., stored in advance are notified through radio data communication by a first radio transmission means 33, and automatically switching the data communication to voice communication by a second radio transmission means 35, when the data communication is completed" (Abstract). "The 2<sup>nd</sup> radio-transmission means 35 is connected to a handset (or hand free set) 36" (paragraph [0015], line 6)).

As to claim 10, Yoshida-Tognazzini discloses the on-vehicle communication system according to claim 9. The Tognazzini reference further discloses communications from the mobile terminal to the service center are made via a communication apparatus different from said on-vehicle communication system associated with said mobile terminal, the communication apparatus existing in the close proximity of said mobile terminal ("the portable device 10 may also be used as a conventional wireless telephone during normal operations" (Col. 8, lines 48-50). "The telephone portion of the emergency locator device 10 and the emergency receiver each include a non-volatile memory 38 that stores a predetermined number corresponding to a rescue

station” (Col. 5, lines 20-23). “Upon the detection of an emergency trigger, the emergency locator device automatically places a wireless telephone call to a predetermined emergency number and supplies the stored location data and vehicle condition data” (Col. 10, lines 47-51). “If the emergency locator device 10 becomes separated from the rest of the vehicle during a crash, the control processor 24a can still provide location and vehicle status information to rescue teams by accessing the memory 38a” (Col. 5, lines 56-60)).

### *Conclusion*

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Tendler (U.S. Patent 6,519,463) discloses location based service request system.
- b. Timm et al. (U.S. Patent 5,572,204) discloses vehicular emergency message system.
- c. Mansell et al. (U.S. Patent 5,223,844) discloses vehicle tracking and security system.
- d. Sorden et al. (U.S. Patent 5,311,197) discloses event-activated reporting of vehicle location.
- e. Simms et al. (U.S. Patent 5,808,564) discloses personal security system with remote activation.
- f. Suarez et al. (U.S. Patent 6,298,306) discloses vehicle locating system utilizing global positioning.

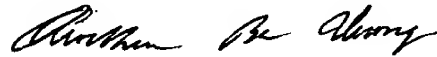
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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duy K Le whose telephone number is 703-305-5660. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F Urban can be reached on 703-305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Duy Le  
November 26, 2003



**QUOCHIEN B. VUONG**  
**PRIMARY EXAMINER**